

FALL ARMYWORM TECH PRIZE WEBINAR QUESTIONS AND ANSWERS

Questions lightly edited for grammar, spelling, and clarity.

Technical questions:

Are you saying that these smallholder farmers have smartphones?

We are saying that there is growth in the availability of smartphones across Africa. We encourage our competitors to think creatively about how they might use a range of digital tools to reach smallholder farmers. These tools may include, but are not limited to, smartphones.

Can you give us some more information on the organic or biological controls for fall armyworm? What products or information sources can you recommend?

There are organic and biological options for controlling fall armyworm. Bt-based biological pesticides are marketed by some local and regional companies working in Kenya, South Africa, and various other countries in Africa. It is important to test these pesticides more widely in other countries and they should not be considered the only biopesticide option.

There are also classical biological control techniques, as well as newly introduced biological control techniques, that have worked well in the Americas. They are currently being tested in local conditions in Africa. Once tested and approved, they may be deployed more widely.

We must also look to parasite-pest associations indigenous to Africa and validate whether they are effective before deploying them more widely. Excellent work is being conducted in this arena. EMBRAPA has some excellent options that are being deployed in Brazil. Going forward, we need to look at internal and external capacity to set up biocontrol factories and make these options available to a wider range of stakeholders.

As with any efforts at pest management, we encourage you to think about what combinations of interventions are sustainable for smallholder farmers with respect to their economic, social, and gender contexts. If you would like to learn more, you can access additional information in the [Fall Armyworm in Africa: A Guide for Integrated Pest Management](#) guide.

Are fall armyworms responsive to light traps?



USAID/Hina Syed

Light traps collect many different types of insects and moths - they are not specific (like pheromone traps) to fall armyworm. Early experiments indicate that light and pheromone traps are effective for monitoring, but not effective in controlling fall armyworm. For these traps to be utilized to attempt controlling the pest, it would require a scale and expense untenable for smallholder farmers.

Prize criteria:

Can you please elaborate more on environmental sustainability of the solution?

We want to ensure that the tools or approaches competitors submit are environmentally responsible. Among the recommendations made to smallholders and advisory, there should be some thought given to best practices around things like the use of pesticides (considering toxicity levels or recommending personal protective equipment). Biocontrols, for example, can be very complex and should not be introduced without sufficient guidance. Innovators should take care not to introduce unapproved treatment options.

Smallholder farmers should also feel comfortable and competent using the proposed innovations and the interventions as the situation demands. As we look at the research surrounding the effective use of citizen science, in Europe, it seems to work well. In low and middle income countries, reliable citizen science has been harder to institute. We encourage you to think carefully about the involvement of people, especially at the smallholder level.

Prize process and structure:

Where and when will the meetings take place?

The co-creation will take place in Uganda June 26-29, 2018.
The winners' award event location is still TBD.

How developed should the prototype be?

Competitors do not need a prototype now, but, if deemed a finalist, the prize requires a prototype in time for the co-creation at the end of June. It should be sufficiently developed that end users such as farmers and extension services can interact with it during the co-creation workshop. Following the co-creation, competitors will have time to make adjustments to their prototype before and during the field test phase. During the field testing, we will be collecting evidence on how your innovation performs with end-users.

Can you explain the difference between the three prizes in more detail? I.e. what kind of innovation would be classed as an 'early stage development'?

Based on the judges' determination, they will use their expertise to recommend:

- One grand prize of \$150,000 to the most viable solution (or best positioned to address fall armyworm immediately in one or some markets).
- Two significant awards of \$75,000 to the most promising solutions that are strong runner-ups capable of impacting the market in the future.

- Two up-and-comer awards of \$50,000 to early stage developments that show high potential, but are using potentially more explorative technologies or approaches. We believe they will achieve market impact, but not until after additional future testing and growth.

To win the prize, should the solution be ready to roll-out at a national level or would a regional level suffice?

We are most concerned that the winning solution be context-specific and valued by smallholder farmers. A national or regional roll-out of a solution that does not adequately serve smallholders will not win.

Are there any requirements or rules on how applicants can spend the prize money?

While we hope winners will invest their prize winnings in further developing their solutions, they are under no obligation to do so.

Proposed innovation questions:

Should this product only be on Android platform specifically?

No, we are platform-agnostic. We want you to reach your target customers using technology that is relevant and accessible to them.

Can you elaborate on the use of geospatial technology?

Digital technologies are never the end goal; they are a means to an end. Geospatial technologies are a tool some competitors may use to incorporate location data as they work with smallholder farmers, for example. Or, satellite imagery might be a data source that some competitors choose to use for their solution to create geographically tailored advice for farmers.

Please confirm that a product that monitors fall armyworm and delivers that information to a country agency via text messages or cell phones would be considered a digital tool.

It would qualify as digital, but we encourage you to consider whether it is focused on sharing information and to whom (whether it is farmers or those who advise them).

Is there a requirement that the winners be open source or would a product for commercial benefit be considered?

Any commercial enterprise can apply. It is at the competitors' discretion whether they want to create open source tools or not.

My solution does [something exciting with smallholders]. Should I apply?

We encourage all prospective applicants to review the prize criteria and see if your innovation is a good fit.

How does the Fall Armyworm Tech Prize relate to the FAO FAMEWS app?

The new FAO FAMEWS app complements the work of the FAW Tech Prize. The FAO app is a phone app focused on helping experts and extension services map and monitor the spread of fall armyworm. The FAW Tech Prize is focused on identifying and accelerating digital solutions of any kind that

help smallholder farmers identify and intervene in the spread of fall armyworm. Both programs are trying to tackle two sides of one very big problem. There are also other emerging technologies in the field of pest identification. We want this prize to encourage and provide incentives that create or adapt relevant digital approaches without duplicating what already exists in the market. The co-creation process is also an opportunity for cross pollination to ensure complementarity, alignment, and/or co-programming among the selected solutions or other existing approaches.

More information:

- Deadlines and details: <https://fallarmywormtech.challenges.org>.
- Contact us: fawtechprize@nesta.org.uk
- Engage: [#FallArmyworm](https://twitter.com/FallArmyworm)